§ 148.300

temperature not greater than 43 °C (110 °F) must first be loaded.

- (e) Petroleum coke must be loaded as follows:
- (1) For a shipment in a hold over a fuel tank, the loading of a cooler layer of petroleum coke in the hold as required by paragraph (d) of this section must be completed before loading the petroleum coke at 55 °C (131 °F) or above in any hold of the vessel;
- (2) Upon completion of the loading described in paragraph (e)(1) of this section, a 0.6 to 1.0 meter (2 to 3 foot) layer of the petroleum coke at 55 °C (131 °F) or above must first be loaded into each hold, including those holds already containing a cooler layer of the petroleum coke; and
- (3) Upon completion of the loading described in paragraph (e)(2) of this section, normal loading of the petroleum coke may be completed.
- (f) The master of the vessel must warn members of a crew that petroleum coke is hot, and that injury due to burns is possible.
- (g) During the voyage, the temperature of the petroleum coke must be monitored often enough to detect spontaneous heating.

§ 148.300 Radioactive materials.

- (a) Radioactive materials that may be stowed or transported in bulk are limited to those radioactive materials defined in 49 CFR 173.403 as Low Specific Activity Material, LSA-1, or Surface Contaminated Object, SCO-1.
- (b) Skin contact, inhalation or ingestion of dusts generated by Class 7 material listed in Table 148.10 of this part must be minimized.
- (c) Each hold used for the transportation of Class 7 material (radioactive) listed in Table 148.10 of this part must be surveyed after the completion of offloading by a qualified person using appropriate radiation detection instruments. Such holds must not be used for the transportation of any other material until the non-fixed contamination on any surface, when averaged over an area of 300 cm², does not exceed the following levels:
- (1) 4.0 Bq/cm² (10⁻⁴ uCi/cm²;) for beta and gamma emitters and low toxicity alpha emitters, natural uranium, natural thorium, uranium-235, uranium-

238, thorium-232, thorium-228 and thorium-230 when contained in ores or physical or chemical concentrates, and radionuclides with a half-life of less than 10 days; and

(2) 0.4 Bq/cm 2 (10 $^{-5}$ uCi/cm 2) for all other alpha emitters.

§148.310 Seed cake.

- (a) This part does not apply to solvent-extracted rape seed meal, pellets, soya bean meal, cotton seed meal, or sunflower seed meal that—
- (1) Contains a maximum of 4 percent vegetable oil and a maximum of 15 percent vegetable oil and moisture combined; and
- (2) As far as practical, is free from flammable solvent.
- (b) This part does not apply to mechanically expelled citrus pulp pellets containing not more than 2.5 percent oil and a maximum of 14 percent oil and moisture combined.
- (c) Before loading, the seed cake must be aged per the instructions of the shipper.
- (d) Before loading, the shipper must give the master or person in charge of a barge a certificate from a competent testing laboratory stating the oil and moisture content of the seed cake.
- (e) The seed cake must be kept as dry as practical at all times.
- (f) If the seed cake is solvent-extracted, it must be— $\,$
- (1) As free as practical from flammable solvent; and
- (2) Stowed in a mechanically ventilated hold.
- (g) For a voyage with a planned duration greater than 5 days, the vessel must be equipped with facilities for introducing carbon dioxide or another inert gas into the hold.
- (h) Temperature readings of the seed cake must be taken at least once in every 24-hour period. If the temperature exceeds 55 °C (131 °F) and continues to increase, ventilation to the cargo hold must be discontinued. If heating continues after ventilation has been discontinued, carbon dioxide or the inert gas required under paragraph (g) of this section must be introduced into the hold. If the seed cake is solvent-extracted, the use of inert gas